

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application.

**Listing of Claims:**

1. (Currently Amended) A detector arrangement for the conversion of electromagnetic radiation into electrical signals, which arrangement includes sensitive areas ~~(D1, D2, D3, D4)~~, each of which corresponds to a respective electrical signal, it being arranged that at least two of the sensitive areas ~~(D1, D2)~~ mesh with one another by interleaving.
2. (Currently Amended) A detector arrangement as claimed in claim 1, ~~characterized in that~~wherein a portion of the meshing of the sensitive areas ~~(D1, D2, D3)~~ with one another is achieved by ~~dentation and/or interleaving~~.
3. (Currently Amended) A detector arrangement as claimed in claim 1, ~~characterized in that~~wherein sampling properties of the sensitive areas ~~(D1, D2, D3, D4)~~ are defined by a respective associated sensitive surface and that meshing is realized by way of the sensitive surfaces.
4. (Currently Amended) A detector arrangement as claimed in claim 1, ~~characterized in that~~wherein the sensitive areas ~~(D1, D2, D3, D4)~~ are formed by at least one of photodiodes or electrodes.
5. (Currently Amended) A detector arrangement as claimed in claim 1, ~~characterized in that~~wherein the sensitive areas ~~(D1, D2, D3, D4)~~ are all of the same size.
6. (Currently Amended) A detector arrangement as claimed in claim 1, ~~characterized in that~~wherein the shape of the sensitive areas ~~(D1, D2, D3, D4)~~ varies.

7. (Previously Presented) An imaging X-ray system which includes a detector arrangement as claimed in claim 1.

8. (Currently Amended) A method for the conversion of electromagnetic radiation into electrical signals, which method includes the following steps comprises:

emission of electromagnetic radiation by a radiation source (RS),

detection of the electromagnetic radiation by means of a detector arrangement

which includes sensitive areas (D1, D2, D3, D4),

conversion of the electromagnetic radiation into electrical signals, where each time one of the sensitive areas corresponds unambiguously to a respective electrical signal, and at least two of the sensitive areas mesh with one another by interleaving, and

propagation of the electrical signals.

9. (New) The detector arrangement of claim 1, wherein the at least two of the sensitive areas that mesh with one another by interleaving are connected to each other along a non-surface portion of the detector arrangement.

10. (New) The detector arrangement of claim 1, wherein the shape of the sensitive areas is the same.

11. (New) The detector arrangement of claim 1, wherein all of the sensitive areas mesh with one another by interleaving.

12. (New) The detector arrangement of claim 1, wherein each of the sensitive areas is symmetrical.

13. (New) The detector arrangement of claim 1, wherein each surface of the sensitive areas is non-planar.

14. (New) The method of claim 8, wherein the at least two of the sensitive areas that mesh with one another by interleaving are connected to each other along a non-surface portion of the detector arrangement.

15. (New) The method of claim 8, wherein the shape of the sensitive areas is the same.

16. (New) The method of claim 8, wherein all of the sensitive areas mesh with one another by interleaving.

17. (New) The method of claim 8, wherein each of the sensitive areas is symmetrical.

18. (New) The method of claim 8, wherein each surface of the sensitive areas is non-planar.